

Claims

1. A method for electroless deposition of a metal onto a substrate, said substrate comprising polyimide exposed at a surface thereof, the method comprising:
5 electroless depositing a metal onto the substrate by applying a solution comprising a metal source, a reducing agent, an additive to adjust the pH of the solution to a predetermined value and an aromatic sulfonic acid.
2. A method according to claim 1, wherein the aromatic sulfonic acid comprises a sulfonic acid, an aromatic group and an apolar chain.
- 10 3. A method according to claim 1, further comprising exposing the surface to an anti-drag-through agent.
4. A method according to claim 1, the method furthermore comprising activating the substrate by applying a solution comprising a colloidal catalyst.
5. A method according to claim 4, wherein the colloidal catalyst includes Pd.
- 15 6. A method according to claim 4 wherein the colloidal catalyst includes Sn.
7. A method according to claim 4 wherein the colloidal catalyst is colloidal Pd/Sn.
8. A method according to claim 4, further comprising applying a solution comprising an accelerator.
9. A method according to claim 7, further comprising applying a solution
20 comprising an accelerator.
10. A method according to claim 1, the method furthermore comprising a preliminary step of cleaning a surface of the substrate.
11. A method according to claim 1, the method furthermore comprising:
25 applying an anti-tarnish solution; and
baking.
12. A method according to claim 1, wherein depositing a metal comprises depositing copper.
13. A method according to claim 1, wherein the substrate is flexible.
14. A method according to claim 1, wherein the substrate is a polyimide substrate.
- 30 15. A method according to claim 1, wherein the substrate comprises through holes or vias.
16. A plating bath for electroless deposition of a metal onto a substrate, the substrate comprising polyimide exposed at a surface thereof, the plating bath comprising a solution comprising a metal source, a reducing agent, an additive

to adjust the pH of the solution to a predetermined value and an aromatic sulfonic acid.

17. A plating bath according to claim 16 further comprising a substrate with polyimide exposed on at least one surface for electroless deposition of the metal.
18. A plating bath according to claim 16, wherein the metal source is copper.
19. A plating according to claim 16, wherein the aromatic sulfonic acid comprises a sulfonic acid, an aromatic group and an apolar chain.